



## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Ronald W. Reynolds  
Serial No.: 10/086153  
Filed: February 26, 2002  
Group: 3726  
Examiner: Not Yet Assigned  
For: LOW-MASS ROLLER OR PULLEY

RECEIVED  
JAN 06 2003  
TECHNOLOGY CENTER R3700

Assistant Commissioner of  
Patents  
Washington, D.C. 20231

Dear Sir:

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to Commissioner of Patents and Trademarks, Washington, DC 20231 on

12/27/02  
(Date of Deposit)

Gregory M. Howson  
(Name of Person Mailing Document)

[Signature]  
(Signature)

12/27/02  
(Date of Signature)

**PETITION TO MAKE SPECIAL UNDER THE ENERGY PROGRAM PURSUANT TO**  
**37 C.F.R. SEC. 1.102(c)**

This is a Petition to Make Special the above-identified patent application. The basis for this petition is that the invention materially contributes to the more efficient utilization and conservation of energy.

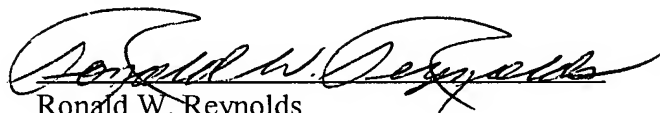
I, Ronald W. Reynolds, the Applicant of the above identified U.S. Patent Application make the following statement explaining how their invention materially contributes to the more efficient utilization and conservation of energy in support of this Petition to Make Special Under the Energy Program.

Materials having sufficient strength, resistance to surface wear and which are appropriate for fabricating the type of rollers or pulleys disclosed in this application also tend to be heavy. For example, steel provides the necessary strength, corrosion resistance and surface durability for cylindrical rollers and pulleys. However, this material is relatively heavy and requires stronger drive motors and greater energy requirements for their operation. A low mass roller of the type shown in Figure 5 of the present application, having a thin-walled outer shell of stainless steel and the polymeric body construction, has roughly the same mass as a solid aluminum roller and also the durability of a solid stainless steel roller. Its lower mass provides the benefits of reduced drive motor size and reduced energy use without sacrificing durability or performance. The low-mass roller of the present disclosure may find application in many types of machines in numerous industrial uses including automotive, business machines, manufacturing operations and others requiring flat belt pulleys, idler pulleys, rollers for mail sorting and extracting equipment, conveyers and the like.

In accordance with 37 C.F.R. Sec. 1.102(c), no fee is required for this petition.

In view of the above, Applicant requests that this Petition be granted and the examination of the application be advanced.

Respectfully submitted,



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RWR:jk  
December 12, 2002